# RAW SEQUENCE LISTING

# *ENTERED*

IFWP

RAW SEQUENCE LISTING               DATE: 01/11/2007
PATENT APPLICATION: US/10/567,731      TIME: 10:56:49

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\01112007\J567731.raw

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    3 <110> APPLICANT: TAKARA BIO INC.
    5 <120> TITLE OF INVENTION: Method of decomposing dsRNA and synthesizing RNA
    7 <130> FILE REFERENCE: 664674
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/567,731
C--> 9 <141> CURRENT FILING DATE: 2006-02-10
    9 <150> PRIOR APPLICATION NUMBER: JP 2003-293553
   10 <151> PRIOR FILING DATE: 2003-08-14
   12 <150> PRIOR APPLICATION NUMBER: JP 2003-342126
   13 <151> PRIOR FILING DATE: 2003-09-30
   15 <150> PRIOR APPLICATION NUMBER: JP 2003-409639
   16 <151> PRIOR FILING DATE: 2003-12-08
   18 <150> PRIOR APPLICATION NUMBER: JP 2004-086129
   19 <151> PRIOR FILING DATE: 2004-03-24
   21 <160> NUMBER OF SEQ ID NOS: 27
   23 <170> SOFTWARE: PatentIn version 3.1
   25 <210> SEQ ID NO: 1
   26 <211> LENGTH: 1924
   27 <212> TYPE: PRT
   28 <213> ORGANISM: Homo sapiens
   30 <400> SEQUENCE: 1
   32 Met Lys Ser Pro Ala Leu Gln Pro Leu Ser Met Ala Gly Leu Gln Leu
   33 1               5                   10                  15
   36 Met Thr Pro Ala Ser Ser Pro Met Gly Pro Phe Phe Gly Leu Pro Trp
   37              20                  25                  30
   40 Gln Gln Glu Ala Ile His Asp Asn Ile Tyr Thr Pro Arg Lys Tyr Gln
   41          35                  40                  45
   44 Val Glu Leu Leu Glu Ala Ala Leu Asp His Asn Thr Ile Val Cys Leu
   45      50                  55                  60
   48 Asn Thr Gly Ser Gly Lys Thr Phe Ile Ala Ser Thr Thr Leu Leu Lys
   49 65                  70                  75                  80
   52 Ser Cys Leu Tyr Leu Asp Leu Gly Glu Thr Ser Ala Arg Asn Gly Lys
   53                  85                  90                  95
   56 Arg Thr Val Phe Leu Val Asn Ser Ala Asn Gln Val Ala Gln Gln Val
   57             100                 105                 110
   60 Ser Ala Val Arg Thr His Ser Asp Leu Lys Val Gly Glu Tyr Ser Asn
   61         115                 120                 125
   64 Leu Glu Val Asn Ala Ser Thr Lys Glu Arg Trp Asn Gln Glu Phe
   65     130                 135                 140
   68 Thr Lys His Gln Val Leu Ile Met Thr Cys Tyr Val Ala Leu Asn Val
   69 145                 150                 155                 160
   72 Leu Lys Asn Gly Tyr Leu Ser Leu Ser Asp Ile Asn Leu Leu Val Phe
   73                 165                 170                 175
   76 Asp Glu Cys His Leu Ala Ile Leu Asp His Pro Tyr Arg Glu Phe Met
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 77                  180                      185                      190
 80 Lys Leu Cys Glu Ile Cys Pro Ser Cys Pro Arg Ile Leu Gly Leu Thr
 81            195                      200                      205
 84 Ala Ser Ile Leu Asn Gly Lys Trp Asp Pro Glu Asp Leu Glu Glu Lys
 85            210                      215                      220
 88 Phe Gln Lys Leu Glu Lys Ile Leu Lys Ser Asn Ala Glu Thr Ala Thr
 89 225                      230                      235                      240
 92 Asp Leu Val Val Leu Asp Arg Tyr Thr Ser Gln Pro Cys Cys Glu Ile Val
 93                  245                      250                      255
 96 Val Asp Cys Gly Pro Phe Thr Asp Arg Ser Gly Leu Tyr Glu Arg Leu
 97            260                      265                      270
100 Leu Met Glu Leu Glu Glu Ala Leu Asn Phe Ile Asn Asp Cys Asn Ile
101            275                      280                      285
104 Ser Val His Ser Lys Glu Arg Asp Ser Thr Leu Ile Leu Ser Lys Gln Ile
105      290                      295                      300
108 Leu Ser Asp Cys Arg Ala Val Leu Val Val Leu Gly Pro Trp Cys Ala
109 305                      310                      315                      320
112 Asp Lys Val Ala Gly Met Met Val Arg Glu Leu Gln Lys Tyr Ile Lys
113            325                      330 .                    335
116 His Glu Gln Glu Glu Leu His Arg Lys Phe Leu Leu Phe Thr Asp Thr
117            340                      345                      350
120 Phe Leu Arg Lys Ile His Ala Leu Cys Glu Glu His Phe Ser Pro Ala
121            355                      360                      365
124 Ser Leu Asp Leu Lys Phe Val Thr Pro Lys Val Ile Lys Leu Leu Glu
125 370                      375                      380
128 Ile Leu Arg Lys Tyr Lys Pro Tyr Glu Arg His Ser Phe Glu Ser Val
129 385                      390                      395                      400
132 Glu Trp Tyr Asn Asn Arg Asn Gln Asp Asn Tyr Val Ser Trp Ser Asp
133            405                      410                      415
136 Ser Glu Asp Asp Asp Glu Asp Glu Glu Ile Glu Glu Lys Gly Lys Pro
137            420                      425                      430
140 Glu Thr Asn Phe Pro Ser Pro Phe Thr Asn Ile Leu Cys Gly Ile Ile
141            435                      440                      445
144 Phe Val Glu Arg Arg Tyr Thr Ala Val Val Leu Asn Arg Leu Ile Lys
145 450                      455                      460
148 Glu Ala Gly Lys Gln Asp Pro Glu Leu Ala Tyr Ile Ser Ser Asn Phe
149 465                      470                      475                      480
152 Ile Thr Gly His Gly Ile Gly Lys Asn Gln Pro Arg Asn Asn Thr Met
153            485                      490                      495
156 Glu Ala Glu Phe Arg Lys Gln Glu Gly Val Leu Arg Lys Ser Phe Arg Ala
157      500                      505                      510
160 His Glu Thr Asn Leu Leu Ile Ala Thr Ser Ile Val Glu Glu Gly Val
161            515                      520                      525
164 Asp Ile Pro Lys Cys Asn Leu Val Val Arg Phe Asp Leu Pro Thr Glu
165 530                      535                      540
168 Tyr Arg Ser Tyr Val Gln Ser Lys Gly Arg Ala Arg Ala Pro Ile Ser
169 545 .                    550                      555                      560
172 Asn Tyr Ile Met Leu Ala Asp Thr Asp Lys Ile Lys Ser Phe Glu Glu
173            565                      570                      575
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176 Asp Leu Lys Thr Tyr Lys Ala Ile Glu Lys Ile Leu Arg Asn Lys Cys
177           580                 585                 590
180 Ser Lys Ser Val Asp Thr Glu Thr Asp Ile Asp Pro Val Met Asp
181           595                 600                 605
184 Asp Asp His Val Phe Pro Pro Tyr Val Leu Arg Pro Asp Asp Gly Gly
185           610                 615                 620
188 Pro Arg Val Thr Ile Asn Thr Ala Ile Gly His Ile Asn Arg Tyr Cys
189 625                 630                 635                 640
192 Ala Arg Leu Pro Ser Asp Pro Phe Thr His Leu Ala Pro Lys Cys Arg
193           645                 650                 655
196 Thr Arg Glu Leu Pro Asp Gly Thr Phe Tyr Ser Thr Leu Tyr Leu Pro
197           660                 665                 670
200 Ile Asn Ser Pro Leu Arg Ala Ser Ile Val Gly Pro Pro Met Ser Cys
201           675                 680                 685
204 Val Arg Leu Ala Glu Arg Val Val Ala Leu Ile Cys Cys Glu Lys Leu
205           690                 695                 700
208 His Lys Ile Gly Glu Leu Asp Asp His Leu Met Pro Val Gly Lys Glu
209 705                 710                 715                 720
212 Thr Val Lys Tyr Glu Glu Glu Leu Asp Leu His Asp Glu Glu Glu Thr
213           725                 730                 735
216 Ser Val Pro Gly Arg Pro Gly Ser Thr Lys Arg Arg Gln Cys Tyr Pro
217           740                 745                 750
220 Lys Ala Ile Pro Glu Cys Leu Arg Asp Ser Tyr Pro Arg Pro Asp Gln
221           755                 760                 765
224 Pro Cys Tyr Leu Tyr Val Ile Gly Met Val Leu Thr Thr Pro Leu Pro
225           770                 775                 780
228 Asp Glu Leu Asn Phe Arg Arg Lys Leu Tyr Pro Pro Glu Asp Thr
229 785                 790                 795                 800
232 Thr Arg Cys Phe Gly Ile Leu Thr Ala Lys Pro Ile Pro Gln Ile Pro
233           805                 810                 815
236 His Phe Pro Val Tyr Thr Arg Ser Gly Glu Val Thr Ile Ser Ile Glu
237           820                 825                 830
240 Leu Lys Lys Ser Gly Phe Met Leu Ser Leu Gln Met Leu Glu Leu Ile
241           835                 840                 845
244 Thr Arg Leu His Gln Tyr Ile Phe Ser His Ile Leu Arg Leu Glu Lys
245           850                 855                 860
248 Pro Ala Leu Glu Phe Lys Pro Thr Asp Ala Asp Ser Ala Tyr Cys Val
249 865                 870                 875                 880
252 Leu Pro Leu Asn Val Val Asn Asp Ser Ser Thr Leu Asp Ile Asp Phe
253           885                 890                 895
256 Lys Phe Met Glu Asp Ile Glu Lys Ser Glu Ala Arg Ile Gly Ile Pro
257           900                 905                 910
260 Ser Thr Lys Tyr Thr Lys Glu Thr Pro Phe Val Phe Lys Leu Glu Asp
261           915                 920                 925
264 Tyr Gln Asp Ala Val Ile Ile Pro Arg Tyr Arg Asn Phe Asp Gln Pro
265           930                 935                 940
268 His Arg Phe Tyr Val Ala Asp Val Tyr Thr Asp Leu Thr Pro Leu Ser
269 945                 950                 955                 960
272 Lys Phe Pro Ser Pro Glu Tyr Glu Thr Phe Ala Glu Tyr Tyr Lys Thr
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                RAW SEQUENCE LISTING                DATE: 01/11/2007
                PATENT APPLICATION:  US/10/567,731  TIME: 10:56:49

                Input Set : A:\Sequence Listing.txt
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273                    965              970                    975
276 Lys Tyr Asn Leu Asp Leu Thr Asn Leu Asn Gln Pro Leu Leu Asp Val
277           980              985              990
280 Asp His Thr Ser Ser Arg Leu Asn Leu Leu Thr Pro Arg His Leu Asn
281           995              1000             1005
284 Gln Lys  Gly Lys Ala Leu Pro  Leu Ser Ser Ala Glu  Lys Arg Lys
285      1010             1015             1020
288 Ala Lys  Trp Glu Ser Leu Gln  Asn Lys Gln Ile Leu  Val Pro Glu
289      1025             1030             1035
292 Leu Cys  Ala Ile His Pro Ile  Pro Ala Ser Leu Trp  Arg Lys Ala
293      1040             1045             1050
296 Val Cys  Leu Pro Ser Ile Leu  Tyr Arg Leu His Cys  Leu Leu Thr
297      1055             1060             1065
300 Ala Glu  Glu Leu Arg Ala Gln  Thr Ala Ser Asp Ala  Gly Val Gly
301      1070             1075             1080
304 Val Arg  Ser Leu Pro Ala Asp  Phe Arg Tyr Pro Asn  Leu Asp Phe
305      1085             1090             1095
308 Gly Trp  Lys Lys Ser Ile Asp  Ser Lys Ser Phe Ile  Ser Ile Ser
309      1100             1105             1110
312 Asn Ser  Ser Ser Ala Glu Asn  Asp Asn Tyr Cys Lys  His Ser Thr
313      1115             1120             1125
316 Ile Val  Pro Glu Asn Ala Ala  His Gln Gly Ala Asn  Arg Thr Ser
317      1130             1135             1140
320 Ser Leu  Glu Asn His Asp Gln  Met Ser Val Asn Cys  Arg Thr Leu
321      1145             1150             1155
324 Leu Ser  Glu Ser Pro Gly Lys  Leu His Val Glu Val  Ser Ala Asp
325      1160             1165             1170
328 Leu Thr  Ala Ile Asn Gly Leu  Ser Tyr Asn Gln Asn  Leu Ala Asn
329      1175             1180             1185
332 Gly Ser  Tyr Asp Leu Ala Asn  Arg Asp Phe Cys Gln  Gly Asn Gln
333      1190             1195             1200
336 Leu Asn  Tyr Tyr Lys Gln Glu  Ile Pro Val Gln Pro  Thr Thr Ser
337      1205             1210             1215
340 Tyr Ser  Ile Gln Asn Leu Tyr  Ser Tyr Glu Asn Gln  Pro Gln Pro
341      1220             1225             1230
344 Ser Asp  Glu Cys Thr Leu Leu  Ser Asn Lys Tyr Leu  Asp Gly Asn
345      1235             1240             1245
348 Ala Asn  Lys Ser Thr Ser Asp  Gly Ser Pro Val Met  Ala Val Met
349      1250             1255             1260
352 Pro Gly  Thr Thr Asp Thr Ile  Gln Val Leu Lys Gly  Arg Met Asp
353      1265             1270             1275
356 Ser Glu  Gln Ser Pro Ser Ile  Gly Tyr Ser Ser Arg  Thr Leu Gly
357      1280             1285             1290
360 Pro Asn  Pro Gly Leu Ile Leu  Gln Ala Leu Thr Leu  Ser Asn Ala
361      1295             1300             1305
364 Ser Asp  Gly Phe Asn Leu Glu  Arg Leu Glu Met Leu  Gly Asp Ser
365      1310             1315             1320
368 Phe Leu  Lys His Ala Ile Thr  Thr Tyr Leu Phe Cys  Thr Tyr Pro
369      1325             1330             1335
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              RAW SEQUENCE LISTING                    DATE: 01/11/2007
              PATENT APPLICATION:  US/10/567,731      TIME: 10:56:49

              Input Set : A:\Sequence Listing.txt
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372 Asp Ala  His Glu Gly Arg Leu  Ser Tyr Met Arg Ser  Lys Lys Val
373     1340               1345                1350
376 Ser Asn  Cys Asn Leu Tyr Arg  Leu Gly Lys Lys Lys  Gly Leu Pro
377     1355               1360                1365
380 Ser Arg  Met Val Val Ser Ile  Phe Asp Pro Pro Val  Asn Trp Leu
381     1370               1375                1380
384 Pro Pro  Gly Tyr Val Val Asn  Gln Asp Lys Ser Asn  Thr Asp Lys
385     1385               1390                1395
388 Trp Glu  Lys Asp Glu Met Thr  Lys Asp Cys Met Leu  Ala Asn Gly
389     1400               1405                1410
392 Lys Leu  Asp Glu Asp Tyr Glu  Glu Glu Asp Glu Glu  Glu Glu Ser
393     1415               1420                1425
396 Leu Met  Trp Arg Ala Pro Lys  Glu Glu Ala Asp Tyr  Glu Asp Asp
397     1430               1435                1440
400 Phe Leu  Glu Tyr Asp Gln Glu  His Ile Arg Phe Ile  Asp Asn Met
401     1445               1450                1455
404 Leu Met  Gly Ser Gly Ala Phe  Val Lys Lys Ile Ser  Leu Ser Pro
405     1460               1465                1470
408 Phe Ser  Thr Thr Asp Ser Ala  Tyr Glu Trp Lys Met  Pro Lys Lys
409     1475               1480                1485
412 Ser Ser  Leu Gly Ser Met Pro  Phe Ser Ser Asp Phe  Glu Asp Phe
413     1490               1495                1500
416 Asp Tyr  Ser Ser Trp Asp Ala  Met Cys Tyr Leu Asp  Pro Ser Lys
417     1505               1510                1515
420 Ala Val  Glu Glu Asp Asp Phe  Val Val Gly Phe Trp  Asn Pro Ser
421     1520               1525                1530
424 Glu Glu  Asn Cys Gly Val Asp  Thr Gly Lys Gln Ser  Ile Ser Tyr
425     1535               1540                1545
428 Asp Leu  His Thr Glu Gln Cys  Ile Ala Asp Lys Ser  Ile Ala Asp
429     1550               1555                1560
432 Cys Val  Glu Ala Leu Leu Gly  Cys Tyr Leu Thr Ser  Cys Gly Glu
433     1565               1570                1575
436 Arg Ala  Ala Gln Leu Phe Leu  Cys Ser Leu Gly Leu  Lys Val Leu
437     1580               1585                1590
440 Pro Val  Ile Lys Arg Thr Asp  Arg Glu Lys Ala Leu  Cys Pro Thr
441     1595               1600                1605
444 Arg Glu  Asn Phe Asn Ser Gln  Gln Lys Asn Leu Ser  Val Ser Cys
445     1610               1615                1620
448 Ala Ala  Ala Ser Val Ala Ser  Ser Arg Ser Ser Val  Leu Lys Asp
449     1625               1630                1635
452 Ser Glu  Tyr Gly Cys Leu Lys  Ile Pro Pro Arg Cys  Met Phe Asp
453     1640               1645                1650
456 His Pro  Asp Ala Asp Lys Thr  Leu Asn His Leu Ile  Ser Gly Phe
457     1655               1660                1665
460 Glu Asn  Phe Glu Lys Lys Ile  Asn Tyr Arg Phe Lys  Asn Lys Ala
461     1670               1675                1680
464 Tyr Leu  Leu Gln Ala Phe Thr  His Ala Ser Tyr His  Tyr Asn Thr
465     1685               1690                1695
468 Ile Thr  Asp Cys Tyr Gln Arg  Leu Glu Phe Leu Gly  Asp Ala Ile
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RAW SEQUENCE LISTING ERROR SUMMARY     DATE: 01/11/2007
PATENT APPLICATION:   US/10/567,731     TIME: 10:56:50

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\01112007\J567731.raw

**Invalid Line Length:**
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:7; Line(s) 1013
Seq#:8; Line(s) 1025

**Invalid <213> Response:**
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:14,15,16,17,18,19,20,21,22,23,24,25,26,27

**VERIFICATION SUMMARY**
PATENT APPLICATION:  US/10/567,731

DATE: 01/11/2007
TIME: 10:56:50

Input Set : **A:\Sequence Listing.txt**
Output Set: **N:\CRF4\01112007\J567731.raw**

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date